

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1. (Currently Amended) A method of determining a clock frequency for a first electronic device and a clock frequency for a second electronic device, the first and second electronic devices being installed in a system with zero or more other electronic devices, the first electronic device being connected to a first bus and the second electronic device being connected to a second bus, the system being capable of executing an application program, the method comprising:

storing, in a memory, information regarding the application program that may be used to determine power consumption and/or heat dissipation characteristics of the system when executing the application program;

obtaining, from the memory, the information regarding the application program;

automatically selecting a first clock frequency for the first electronic device and a second clock frequency for the second electronic device, based at least on the information about the application program;

generating a clock signal for the first electronic device in accordance with the selected first clock frequency; and

generating a clock signal for the second electronic device in accordance with the selected second clock frequency.

2. (Currently Amended) The method of Claim 1, further comprising supplying a first clock signal having the ~~automatically~~ selected first clock frequency to the first electronic device and supplying a second clock signal having the ~~automatically~~ selected second clock frequency to the second electronic device.

3. (Currently Amended) The method of Claim 1, further comprising supplying a first clock signal having the ~~automatically~~ selected first clock frequency to the first bus and supplying a second clock signal having the ~~automatically~~ selected second clock frequency to the second bus.

4. (Currently Amended) The method of Claim 1, wherein the ~~automatically~~ selecting the first and second clock frequencies is further based on information about the first and second electronic devices and the zero or more other electronic devices installed in the system.
5. (Original) The method of Claim 1, wherein the information about the application program comprises information about relative loads the application program places on the first and the second devices.
6. (Currently Amended) The method of Claim 5, wherein the first device is a memory and the second device is an input/output (I/O) device.
7. (Currently Amended) The method of Claim 1, wherein:
 - the first device is a memory and the second device is an I/O device; and
 - the ~~automatically~~ selecting the first and second clock frequencies comprises:
 - if the application program is of a first category:
 - selecting a higher first clock frequency than would otherwise be selected
 - and
 - selecting a lower second clock frequency than would otherwise be selected; and
 - if the application program is of a second category:
 - selecting a higher second clock frequency than would otherwise be selected and
 - selecting a lower first clock frequency than would otherwise be selected.
8. (Original) The method of Claim 6, wherein the first category includes application programs that are expected to be more memory intensive than I/O intensive.

9. (Original) The method of Claim 6, wherein the second category includes application programs that are expected to be more I/O intensive than memory intensive.

10. (Currently Amended) The method of Claim 1, wherein the ~~automatically~~ selecting the first and second clock frequencies comprises:

if the application program accesses the first device more than the application program accesses the second device:

selecting a higher first clock frequency than would otherwise be selected and
selecting a lower second clock frequency than would otherwise be selected.

11. (Original) The method of Claim 1, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises a number of the other electronic devices installed in the system.

12. (Currently Amended) The method of Claim 1, wherein the ~~automatically~~ selecting a clock frequency is further based on a thermal budget for the system.

13. (Currently Amended) The method of Claim 1, wherein the ~~automatically~~ selecting a clock frequency is further based on a power consumption budget for the system.

14. (Currently Amended) The method of Claim 1, further comprising ~~automatically~~ ascertaining at least some of the information about the first and second electronic devices and the zero or more other electronic devices installed in the system.

15. (Currently Amended) The method of Claim 14, wherein the ~~automatically~~ ascertaining at least some of the information comprises:

querying at least one of the first and second electronic devices; and
in response to the querying, receiving information from at least one of the first and second electronic devices.

16. (Currently Amended) The method of Claim 14, wherein the ~~automatically~~ ascertaining at least some of the information comprises reading at least a portion of a memory.

17. (Currently Amended) The method of Claim 16, wherein the memory comprises a dual in-line package (DIP) switch.

18. (Original) The method of Claim 1, further comprising ascertaining at least some of the information about the first and second electronic devices through a user interface.

19. (Original) The method of Claim 1, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises information about an amount of heat at least one of the first and second electronic devices and the zero or more other electronic devices would generate in relation to a clock frequency at which the corresponding at least one of the first and second electronic devices and the zero or more other electronic devices would operate.

20. (Original) The method of Claim 1, wherein at least one of the first and second electronic devices is removably installed in an expansion slot.

21. (Original) The method of Claim 1, wherein at least one of the zero or more other electronic devices is removably installed in an expansion slot.

22. (Currently Amended) An article of manufacture, comprising:

a computer-readable medium storing computer-executable instructions capable of determining a clock frequency for a first electronic device and a clock frequency for a second electronic device, the first and second electronic devices being installed in a system with zero or more other electronic devices, the first electronic device being connected to a first bus and the second electronic device being connected to a second bus, the system being capable of executing an application program, comprising:

storing, in a memory, information regarding the application program that may be used to determine power consumption and/or heat dissipation characteristics of the system when executing the application program;

obtaining, from the memory, the information regarding the application program;

automatically selecting a first clock frequency for the first electronic device and a second clock frequency for the second electronic device, based at least on information about the application program; and

wherein a clock signal for the first electronic device is generated in accordance with the selected first clock frequency; and

wherein a clock signal for the second electronic device is generated in accordance with the selected second clock frequency.

23. (Currently Amended) A frequency manager for determining a clock frequency for a first electronic device and a clock frequency for a second electronic device, the first and second electronic devices being installed in a system with zero or more other electronic devices, the first electronic device being connected to a first bus and the second electronic device being connected to a second bus, the system being capable of executing an application program, comprising:

a memory storing information regarding the application program that may be used to determine power consumption and/or heat dissipation characteristics of the system when executing the application program;

a frequency calculator automatically obtaining the stored information from the memory and selecting a first clock frequency for the first electronic device and a second clock frequency for the second electronic device, based at least on the stored information about the application program; and

an interface connected to the frequency calculator, to a first clock signal generator and to a second clock frequency generator, the interface sending commands:

to the first clock signal generator to generate clock signals at the first clock frequency and

to the second clock frequency generator to generate clock signals at the second clock frequency.

24. (Currently Amended) The frequency manager of Claim 23, wherein the frequency calculator further bases the ~~automatically~~ selecting a first and second clock frequency on information about the first and second electronic devices and the zero or more other electronic devices installed in the system.

25. (Original) The frequency manager of Claim 23, wherein the information about the application program comprises information about relative loads the application program places on the first and the second devices.

26. (Currently Amended) The frequency manager of Claim 24, wherein the first device is a memory and the second device is an input/output (I/O) device.

27. (Currently Amended) The frequency manager of Claim 23, wherein:
the first device is a memory and the second device is an input/output (I/O) device;
and
if the application program is of a first category:
the frequency calculator selects a higher first clock frequency than would otherwise be selected and the frequency calculator selects a lower second clock frequency than would otherwise be selected; and
if the application program is of a second category:
the frequency calculator selects a higher second clock frequency than would otherwise be selected and the frequency calculator selects a lower first clock frequency than would otherwise be selected.
28. (Original) The frequency manager of Claim 27, wherein the first category includes application programs that are expected to be more memory intensive than I/O intensive.
29. (Original) The frequency manager of Claim 27, wherein the second category includes application programs that are expected to be more I/O intensive than memory intensive.
30. (Original) The frequency manager of Claim 23, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises a number of the other electronic devices installed in the system.
31. (Original) The frequency manager of Claim 23, wherein the frequency calculator further bases the ~~automatically~~ selecting a first and second clock frequency on a thermal budget for the system.
32. (Currently Amended) The frequency manager of Claim 23, wherein the frequency calculator further bases the ~~automatically~~ selecting a first and second clock frequency on a power consumption budget for the system.
33. (Currently Amended) The frequency manager of Claim 23, further comprising an information input ~~automatically~~ ascertaining at least some of the information about the first and second electronic devices.

34. (Original) The frequency manager of Claim 32, wherein the information input queries at least one of the first and second electronic devices to ascertain the at least some of the information about the first and second electronic devices.

35. (Original) The frequency manager of Claim 32, further comprising a memory storing at least some of the information about the first and second electronic devices.

36. (Currently Amended) The frequency manager of Claim 35, wherein the memory comprises a dual in-line package (DIP) switch.

37. (Original) The frequency manager of Claim 23, further comprising a user interface, by which the frequency manager can ascertain at least some of the information about the first and second electronic devices.

38. (Original) The frequency manager of Claim 23, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises information about an amount of heat at least one of the first and second electronic devices and the zero or more other electronic devices would generate in relation to a clock frequency at which the corresponding at least one of the first and second electronic devices and the zero or more other electronic devices would operate.

39. (Original) The frequency manager of Claim 23, wherein at least one of the first and second electronic devices is removably installed in an expansion slot.

40. (Original) The frequency manager of Claim 23, wherein at least one of the zero or more other electronic devices is removably installed in an expansion slot.